## Carbofuran Detections in the Sacramento Valley Agricultural Drains 1987-1997

## Department of Pesticide Regulation Environmental Monitoring and Pest Management Branch Rice Pesticides Program Water quality monitoring results

Sample year	Peak Concentrations in the Colusa Basin Drain near Hwy 20 in Colusa County (µg/l)	Peak Concentrations in Butte Slough near Hwy 20 in Sutter County (µg/l)	Limit of Quantitation (µg/l) <sup>1</sup>
1987	13	1.3	1.0 (MDL <sup>2</sup> )
1988	Not sampled	4.4	1.0 (MDL)
1989	Not sampled	1.5	1.0 (MDL)
1990	2.6	<1.6	1.6
1991 ³	0.6	<0.4	0.4
1992	0.7	<0.4	0.4
1993	3.0	0.8	0.4
1994	1.6	0.4	0.4
1995	0.7	0.57	0.35
1996	$2.45^{2}$	<0.35	0.35
1997	0.62	0.59	0.35

<sup>&</sup>lt;sup>1</sup>Limit of Quantitation is the level at which the analytical laboratory can quantify the analytical results.

<sup>&</sup>lt;sup>2</sup>MDL = Method Detection Limit is the level at which the analytical laboratory can detect the presence of carbofuran. Laboratories are not usually able to quantify the results at MDL levels. <sup>3</sup> In 1991, the Rice Pesticides Program established management practices to be followed when using carbofuran on rice to meet a goal of 0.4  $\mu$ g/l in surface water. These management practices included holding treated water on the site of application for extended periods of time and were enforced through the county agricultural commissioners. The required holding times were increased for the 1994 season.